

Arizona Department of Environmental Quality



via e-mail

May 31, 2018 FPU18-246

Ms. Catherine Jerrard AFCEC/CIBW 706 Hangar Road Rome, NY 13441

RE: WAFB – ADEQ Comments - Draft Annual 2016 Groundwater Monitoring Report, Former Liquid Fuels Storage Area, Site ST012, Former Williams Air Force Base, Mesa, Arizona; prepared for Air Force Civil Engineer Center (AFCEC/CIBW), Lackland AFB, TX; prepared by Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec), Phoenix, AZ; document dated May 2, 2018.

Dear Ms. Jerrard:

Arizona Department of Environmental Quality (ADEQ) Federal Projects Unit (FPU) and ADEQ contractor UXO Pro, Inc. reviewed the above referenced document. ADEQ's comments are provided below.

General Comments

(1) Review monitoring plan to replace or incorporate other interior groundwater monitoring wells into the monitoring plan. Significant analytical and water level data gaps exist in the central plume area. A generic *high temperature* label seems to be a common reason cited for not obtaining data.

Specific Comments

- 1. Page 2-1, Section 2.1, lines 238-242. Please include a table showing the temperatures of those wells during the sampling time period. Several wells were not sampled due to "high temperatures."
- 2. Page 3-3, Section 3.3, lines 474-478. Please discuss the areas requiring additional characterization based on the dashed contour lines on the referenced figures.
- 3. Page 3-1, Section 3.1.1, lines 374-380 (and Figure 3-2). Please discuss SEE operation impacts on groundwater levels and flow direction between the November 2015 and November/December 2016 monitoring events. Provided contours (Figure 3-2) visually indicate the groundwater flow direction varies upgradient and downgradient from the stated groundwater flow direction.
- 4. Page 3-4, Section 3.3.2. Please discuss 1,2-dichloroethane detection above the MCL in well ST012-W36.

- 5. Page 3-5, Section 3.3.2.1, lines 538-542. Please expand the discussion to include the historical results. The report states well ST012-W34 contained an "unusually high" benzene concentration of 1,100 μ g/L in November 2015. However, benzene was reported at 4,400 μ g/L in May 2015 and 7,200 μ g/L in June 2015.
- 6. Figure 3-2. Review the 1193.5 elevation contour's position relative to well ST012-U38.
- 7. Appendix F.
 - a. The concentration graph for well ST012-U02 should be updated through November-December 2016 update graphs through November-December 2016 to match the date of the report.
 - b. Two sets of graphs are included for wells ST012-W36 and -W37. The initial set of graphs appears out of place, as they only include data through November 2015 (W36) and November 2014 (W37). In addition, the y-axis on the ST012-W37 graph needs to be corrected.
 - c. The second graph for well ST012-W36 is missing a label in the legend.
 - d. The second graph for well ST012-37 is missing ethylbenzene and toluene.

Closure

ADEQ may add or amend comments if evidence to the contrary of our understanding is discovered; if received information is determined to be inaccurate; if any condition was unknown to ADEQ at the time this document was submitted; if other parties bring valid concerns to our attention; or site conditions are deemed not protective of human health and the environment within the scope of this Department.

Thank you for the opportunity to comment. Should you have any questions regarding this correspondence, please contact me by phone at (602) 771-4121 or e-mail miller.wayne@azdeq.gov.

Sincerely,

Wayne Miller

ADEQ Project Manager, Federal Projects Unit

Remedial Projects Section, Waste Programs Division

cc: Catherine Jerrard, USAF AFCEC/CIBW

Carolyn d'Almeida, U.S. EPA Ardis Dickey, AFCEC/CIBW

Steve Willis, UXO Pro, Inc.

ADEQ Reading and Project File

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